

XI. *An Extract*, by Philip Henry Zollman, Esq; F. R. S. of a Philosophical Account of a new Opinion concerning the Origin of Petrifications found in the Earth, which has been hitherto ascribed to the universal Deluge; as contained in an Italian Book, intitled, *De Crostacei ed altri marini Corpi che se trovano fu' Monti*, di Anton. Lazzaro Moro, Venice 1740. communicated together with several Remarks, by Dr. Balthasar Ehrhart, Physician in Ordinary at Memmingen, and Member of the Acad. Nat. Curios. in High-Dutch at Memmingen, 1745. 4to.

Read April 24.
1746.

THE Italian Author has adopted a new System concerning marine Petrification, the Cause of which he refers to Fire, instead of Water, according to the Opinion commonly received.

The Place of his Abode has furnished him with particular Opportunities of comparing marine Petrifications found in the Mountains, with the true marine Bodies produced by the Sea. The said Place is called *San Vito di Tagliamento*, 6 Hours Journey from *Venice*, under the Bishop of *Concordia*, belonging to the Patriarch of *Aquileia*.

The Author is a Clergyman; but never entered into any ecclesiastical Community, nor into any University,

verfity as Profefſor ; to be out of the Way of Envy : However he keeps a Boarding-School for young Men. He has publiſhed the Book in Queſtion at his own Expence ; which has brought him into ſome Trouble, and render'd the Book at firſt very ſcarce. He ſhews a great Conformity to the Principles of Sir *Iſaac Newton*, and other modern Philoſophers, not very common in *Italy*, grounding himſelf upon Experience, and mathematical Proofs.

Having in the firſt Part formed the State of the Queſtion, he examines the Syſtems of *Burnet* and *Woodward*, almoſt generally received by the Learned, though the former does not make any expreſs Mention of Petrification. He refutes their Opinions about the Deluge, and of its being the Cauſe of Petrifications. He lays down for a fundamental Maxim, that the Deluge ought to be believed, according to the Scripture, as a Miracle, and not to be proved by natural Rules ; from which he proceeds to another ; viz. That whoever lays down, for a Foundation, a Principle which does not fit the ſeveral *Phænomena*, builds upon an erroneous Principle.

After having refuted at large Dr. *Woodward's* Opinions, he proceeds to the eſtabliſhing his own Syſtem, grounded upon ſubterraneous Fire, with various Arguments of his own, and with the Refutation of thoſe of others.

He firſt lays down ſome general Principles, according to Sir *Iſaac Newton*, &c. and then applies to them ſeveral Inſtances for ſupporting his Syſtem.

The firſt is the new Iſland riſen out of the Sea in the Year 1707, near the Iſland *Santorini* in the *Archipelago*.

The second is a Mountain, which rose out of the Earth in 1538. near *Pozzuolo* in the Kingdom of *Naples*, overwhelmed the little Town *Tripergula*, and dried up a navigable Lake named *Lucrano*; being now called the *New Mountain*, equal in Height to a neighbouring old one, called *Monte Barbaro*.

From the Circumstances attending those Events, he endeavours to prove his new Hypothesis.

He calls to Help the several Eruptions of the Mountains *Vesuvius* and *Ætna*; and then forms his Thesis; viz. " That marine Animals and Productions " (for Instance, Shells, &c.) which are now found " in high Mountains, were first generated in the Sea: " But when those Mountains were raised, by subterraneous Fire, above the Surface of the Sea, were " petrified so as they now appear."

This Thesis *Moro* endeavours to support, by giving the Detail of the 12 several *Strata* found in the Territories of *Modena*, when they are digging for Wells, mention'd by *Woodward*, *Camerarius*, *Vallisneri*, and *Ramazzini*; whose Remarks, as well as the newer ones of *Whiston* and *Bourguet*, he will not allow to be satisfactory; the greatest Difficulty being this, that, from the Nature of some of those *Strata*, it seems that the Sea has twice covered the Plain of *Modena*, now above some Hundreds of Feet above the Level of the Sea; and that from another *Stratum* it may be inferred, that, in the Intervals between those Overflowings of the Sea, the Land has been inhabited and cultivated. His Thesis he endeavours to support, by a remarkable Passage from *Pliny*, Book II. Chap. 87. *Ingens terrarum portentum L. Marcio, Sex. Julio Coss. in agro Mutinensi! Namque montes*

montes duo inter se concurrerunt, crepitu maximo assultantes, recedentesque; inter eos flamma fumoque in cælum exeunte, &c.

Dr. *Ehrhart* compares with this the several *Strata* found in digging in the Neighbourhood of *Memmingen* last Year.

Moro touches next upon the Hypothesis of some, that the Sea increases about one Foot in Height in about two Centuries; and of some others, that it decreases five Feet in one Century; as also, how the Saltness of the Sea may be deduced from his Hypothesis.

Dr. *Ehrhart* hopes that *Moro's* System may one time prevail against Prejudices, as well as those of *Vergilius, Galileus, Harvey, &c.*

XII. *Further Observations and Experiments on the Passion-Flower, and its Farina, by Mr. Badcock, communicated by Mr. Henry Baker, F. R. S.*

Read April 24. 1746. **I**N my last Account p. 157. I concluded with observing, that what was in the Top of the Pistil, was so far from making me believe it *Papilla*, or any other Passage for the Action of the *Farina*, that I described it to stand thus \emptyset ; and queried if there might not be Pores on its Top, as granting the Action of the *Farina* to have its Effect and Consequence, as described by Mr. *Needham*, p. 80. as there was no Possibility of its ever being in the Nature